ABSTRACT OF THE DISCLOSURE

We identified a novel protein (Gm1) comprising an amino acid sequence part having a high homology with a domain having a high homology with a GTP binding site and a GTPase site conserved among G protein α subunits and a trimer forming domain conserved among G protein α subunits. The Gm1 is involved in an signal transduction via a G protein-coupled receptor (GPCR) stimulation. Accordingly, this protein is considered to be a novel G protein. The Gm1 is expressed intensively in human brain, thymus, testes, spleen, small intestine, uterus and heart. We also established a method for screening for a substance capable of regulating a cellular signal transduction employing a polynucleotide encoding the Gm1.